

## EAST Search History

| Ref # | Hits | Search Query   | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|------|--|---|------------------|---------|------------------|
| L1    | 10   | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near8 (even or even\$1number\$3) near8 (odd or odd\$1number\$2) near8 (null or empty or zero or "0" or (no\$1 adj2 data)))) and 375/260.CCLS.         | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/12/06 10:55 |
| L2    | 9    | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near8 (even or even\$1number\$3) near8 (odd or odd\$1number\$2) near8 (null or empty or zero or "0" or (no\$1 adj2 data)))) and 370/503,203,210.CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/12/06 10:56 |
| S1    | 1    | ("5732113").PN.  | US-PGPUB;<br>USPAT;<br>USOCR                          | OR               | OFF     | 2007/11/29 09:29 |
| S2    | 1    | ("20040136464").PN.  | US-PGPUB;<br>USPAT;<br>USOCR                          | OR               | OFF     | 2007/11/29 09:36 |
| S3    | 0    | ("20040136464and(preamblewithsubcarrier)").PN.   | US-PGPUB;<br>USPAT;<br>USOCR                          | OR               | OFF     | 2007/11/29 09:36 |
| S4    | 1    | "20040136464" and (preamble with subcarrier)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/11/29 10:11 |
| S5    | 2    | ((short adj1 preamble) with (subcarrier\$1 or tone\$1 or sub\$1frequenc\$3) with even) and ((short adj1 preamble) with (subcarrier\$1 or tone\$1 or sub\$1frequenc\$3) with odd) and ifft  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/11/29 10:17 |
| S6    | 13   | ((preamble) with (subcarrier\$1 or tone\$1 or sub\$1frequenc\$3) with even) and ((preamble) with (subcarrier\$1 or tone\$1 or sub\$1frequenc\$3) with odd)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/11/29 10:17 |
| S7    | 2    | ((short adj1 preamble) with (subcarrier\$1 or tone\$1 or sub\$1frequenc\$3) with even) and ((short adj1 preamble) with (subcarrier\$1 or tone\$1 or sub\$1frequenc\$3) with odd)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/11/29 10:17 |

## EAST Search History

|     |     |   |   |    |    |                  |
|-----|-----|---|---|----|----|------------------|
| S8  | 5   | ((preamble) with (subcarrier\$1 or tone\$1 or sub\$1frequenc\$3) with even with (null or zero)) and ((preamble) with (subcarrier\$1 or tone\$1 or sub\$1frequenc\$3) with odd with (null or zero))                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 10:26 |
| S9  | 328 | ((subcarrier\$1 or tone\$1 or sub\$1frequenc\$3) with (even or even\$1number\$3) with (null or zero))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 10:27 |
| S10 | 43  | ((subcarrier\$1 or tone\$1 or sub\$1frequenc\$3) near4 (even or even\$1number\$3) near4 (null or zero))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 10:28 |
| S11 | 49  | ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3) near4 (even or even\$1number\$3) near4 (null or zero))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 10:45 |
| S12 | 14  | ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3) near4 (even or even\$1number\$3) near4 (null or zero)) and ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3) with (odd or odd\$1number\$2) with (null or zero)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 10:32 |
| S13 | 75  | ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3) near4 (even or even\$1number\$3) near7 (null or zero))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 10:46 |
| S14 | 15  | ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3) near4 (even or even\$1number\$3) near7 (null or zero)) and ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3) with (odd or odd\$1number\$2) with (null or zero)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 13:41 |
| S15 | 0   | ((sub\$1channel\$1 or bin\$1) near4 (even or even\$1number\$3) near7 (null or zero)) and ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3) with (odd or odd\$1number\$2) with (null or zero))                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 13:37 |

## EAST Search History

|     |    |   |   |    |    |                  |
|-----|----|---|---|----|----|------------------|
| S16 | 1  | ((channel\$1) near4 (even or even\$1number\$3) near7 (null or zero)) and ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3) with (odd or odd\$1number\$2) with (null or zero))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 13:38 |
| S17 | 1  | ((channel\$1) near4 (even or even\$1number\$3) near7 (null or zero or empty or (no adj1 data))) and ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3) with (odd or odd\$1number\$2) with (null or zero or ampty or (no\$1 adj1 data)))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 13:39 |
| S18 | 1  | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1) near4 (even or even\$1number\$3) near7 (null or zero or empty or (no adj1 data))) and ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3) with (odd or odd\$1number\$2) with (null or zero or ampty or (no\$1 adj1 data)))        | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/05 20:34 |
| S19 | 15 | ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3 or sub\$1band\$1 or sub\$1channel\$1 or bin\$1) near4 (even or even\$1number\$3) near7 (null or zero)) and ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3) with (odd or odd\$1number\$2) with (null or zero))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 13:42 |
| S20 | 20 | ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3 or sub\$1band\$1 or sub\$1channel\$1 or bin\$1) near4 (even or even\$1number\$3) near7 (null or zero)) and ((sub\$1carrier\$1 or tone\$1 or sub\$1frequenc\$3 or sub\$1band\$1 or sub\$1channel\$1 or bin\$1) with (odd or odd\$1number\$2) with (null or zero)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 13:55 |
| S21 | 28 | ((preamble or pilot or header or training or sync) with (zero or null) near5 even) and ((preamble or pilot or header or training or sync) with (zero or null) near4 odd)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 13:57 |
| S22 | 66 | ((preamble or pilot or header or training or sync) with (zero or null or "0" or empty) near5 even) and ((preamble or pilot or header or training or sync) with (zero or null or "0" or empty) near4 odd)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 13:59 |

## EAST Search History

|     |     |   |   |    |    |                  |
|-----|-----|---|---|----|----|------------------|
| S23 | 25  | ((preamble or pilot or header or training or sync) with (zero or null or "0" or empty) near5 even) and ((preamble or pilot or header or training or sync) with (zero or null or "0" or empty) near4 odd) and (sub\$1carrier\$1 or sub\$1frequenc\$3 or sub\$1channel or tone or bin\$1)     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/29 14:00 |
| S24 | 14  | ((preamble or pilot or header or training or sync) with (zero or null or "0" or empty) near5 even) and (((preamble or pilot or header or training or sync) with (zero or null or "0" or empty) near4 odd) same (sub\$1carrier\$1 or sub\$1frequenc\$3 or sub\$1channel or tone or bin\$1))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/30 08:21 |
| S25 | 0   | (reduc\$3 or suppress\$3 or decreas\$3) near5 (papr or (peak adj2 average adj1 power adj1 ratio)) and (low near3 (cross\$1correlat\$3) near5 (preamble\$1 or pilot\$1 or training\$1)) and (even or odd)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/30 08:17 |
| S26 | 201 | (reduc\$3 or suppress\$3 or decreas\$3) near5 (papr or (peak adj2 average adj1 power adj1 ratio)) and ((preamble\$1 or pilot\$1 or training\$1)) and (even or odd)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/30 08:17 |
| S27 | 51  | (reduc\$3 or suppress\$3 or decreas\$3) near5 (papr or (peak adj2 average adj1 power adj1 ratio)) and ((preamble\$1 or pilot\$1 or training\$1)) same (even or odd)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/30 08:18 |
| S28 | 10  | (reduc\$3 or suppress\$3 or decreas\$3) near5 (papr or (peak adj2 average adj1 power adj1 ratio)) and ((preamble\$1 or pilot\$1 or training\$1)) same (even same odd)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/30 08:18 |
| S29 | 14  | ((preamble or pilot or header or training or sync) with (zero or null or "0" or empty) near8 even) and (((preamble or pilot or header or training or sync) with (zero or null or "0" or empty) near4 odd) same (sub\$1carrier\$1 or sub\$1frequenc\$3 or sub\$1channel or tone or bin\$1))) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/11/30 08:22 |

## EAST Search History

|     |       |   |   |    |    |                  |
|-----|-------|---|---|----|----|------------------|
| S30 | 2     | ((channel near2 estimat\$) near6 (odd adj1 (tone\$1 or sub\$1carrier\$1 or sub\$1frequenc\$3 or sub\$1channel\$1))) and ((channel near2 estimat\$) near6 (even adj1 (tone\$1 or sub\$1carrier\$1 or sub\$1frequenc\$3 or sub\$1channel\$1)))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/05 19:39 |
| S31 | 2     | ((channel near2 estimat\$) near6 (odd adj1 (tone\$1 or sub\$1carrier\$1 or sub\$1frequenc\$3 or sub\$1channel\$1)))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/05 19:39 |
| S32 | 9     | ((channel near2 estimat\$) near6 (odd near3 (tone\$1 or sub\$1carrier\$1 or sub\$1frequenc\$3 or sub\$1channel\$1)))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/05 19:57 |
| S33 | 7     | ((channel near2 estimat\$) near6 (odd near3 (tone\$1 or sub\$1carrier\$1 or sub\$1frequenc\$3 or sub\$1channel\$1))) and (even near5 (channel near2 estimat\$3))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/05 19:58 |
| S34 | 61    | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near4 (even or even\$1number\$3) near7 (null or zero or empty or (no adj1 data))) and ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) with (odd or odd\$1number\$2) with (null or zero or ampty or (no\$1 adj1 data)))              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/05 22:10 |
| S35 | 59926 | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near4 (even or even\$1number\$3) near7 (null or zero or empty or (no adj1 data))) and ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) with (odd or odd\$1number\$2) with (null or zero or ampty or (no\$1 adj1 data))) abd preamble | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/05 22:10 |

## EAST Search History

|     |      |   |   |    |    |                  |
|-----|------|---|---|----|----|------------------|
| S36 | 9    | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near4 (even or even\$1number\$3) near7 (null or zero or empty or (no adj1 data))) and ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) with (odd or odd\$1number\$2) with (null or zero or ampty or (no\$1 adj1 data))) and preamble | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/06 08:37 |
| S37 | 4267 | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near8 (even or even\$1number\$3) near8 (odd or odd\$1number\$2))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/06 08:38 |
| S38 | 299  | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near8 (even or even\$1number\$3) near8 (odd or odd\$1number\$2)) and ofdm  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/06 09:01 |
| S39 | 86   | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near8 (even or even\$1number\$3) near8 (odd or odd\$1number\$2)) same (preamble or training or pilot or known)) and ofdm   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/06 08:50 |
| S40 | 11   | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near8 (even or even\$1number\$3) near8 (odd or odd\$1number\$2)) same (preamble or training or pilot or known or sync)) and (papr)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/06 08:51 |
| S41 | 1    | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near7 (odd or odd\$1number\$2)) same (preamble or training or pilot or known or sync)) same ((low or reduc\$3 or suppress\$3) near3 (papr or (peak adj2 power adj2 ratio)))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/12/06 08:54 |

## EAST Search History

|     |     |   |   |    |     |                  |
|-----|-----|---|---|----|-----|------------------|
| S42 | 1   | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) with (odd or odd\$1number\$2)) same (preamble or training or pilot or known or sync)) same ((low or reduc\$3 or suppress\$3) near3 (papr or (peak adj2 power adj2 ratio))) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2007/12/06 08:55 |
| S43 | 13  | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) with (odd or odd\$1number\$2)) same (preamble or training or pilot or known or sync)) and ((low or reduc\$3 or suppress\$3) near3 (papr or (peak adj2 power adj2 ratio)))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2007/12/06 08:55 |
| S44 | 34  | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near8 (even or even\$1number\$3) near8 (odd or odd\$1number\$2) near8 (null or empty or zero or "0" or (no\$1 adj2 data))) and ofdm  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2007/12/06 09:02 |
| S45 | 284 | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near8 (even or even\$1number\$3) near8 (odd or odd\$1number\$2) near8 (null or empty or zero or "0" or (no\$1 adj2 data)))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2007/12/06 09:03 |
| S46 | 188 | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near8 (even or even\$1number\$3) near8 (odd or odd\$1number\$2) near8 (null or empty or zero or "0" or (no\$1 adj2 data))) and (communication or ofdm)                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2007/12/06 10:54 |
| S47 | 44  | ((channel\$1 or sub\$1channel\$1 or sub\$1frequenc\$3 or bin\$1 or sub\$1band\$1 or sub\$1carrier\$1 or tone\$1) near8 (odd or odd\$1number\$2)) and (preamble near3 (choos\$3 or select\$3))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2007/12/06 09:37 |
| S48 | 1   | ("20060129649").PN.   | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | OFF | 2007/12/06 09:38 |

## EAST Search History

|     |   |                     |                              |    |     |                  |
|-----|---|---------------------|------------------------------|----|-----|------------------|
| S49 | 1 | ("20060120473").PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2007/12/06 09:38 |
|-----|---|---------------------|------------------------------|----|-----|------------------|